В

July 14, 2009 2:44:39 PM

Item ID:

D3156-1

Bracket

Revision ID:

Item Name:

7/15/09 **Start Date:**

Required Date: 7/15/09

QC:

Start Qty: 8.00 Req'd Qty: 8.00

Accept



Setup Start



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: (207/07/14

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Rev.

Run

Start

Stop



Stop

Sequence ID/ Work Center ID Operation Description Set Up/ **Run Hours**

Draw Number

Plan Draw Code

Accept Qty Qty

Reject

Reject Number Stamp

Draw Nbr

Revision Nbr

D3156 Rev B

110

Waterjet

FLOW CNC Waterjet

HAAS CNC VERTICAL MACHINING #1

Memo

Cut as per dw D3156 Prog rev:

0.00

0.00

Dwg rev:

Deburr as required

120

QC2- Inspect parts off machine FAI/FAIB

0.00

0.00

B 9-7- 27

B 9-7-22

Memo

Quality Control

Dart Aerospace Ltd

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|-------------------|-----------|-------------------|----------------------|------------------------------|----------------|--------------|--------|-------------------------------------|--------------------------|
| W/O: | | | WC | RK ORDER CHANGE | S | | | | |
| DATE | STEP | PRO | OCEDURE CHA | NGE | Ву | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Part No | : | PAR #: | Fault Cate | gory: | NCR: Yes | No DQ | A: | Date: _ | |
| | | | | | QA: N | C Close | d: | Date: | |
| NCR: | | , | WORK ORDI | ER NON-CONFORMAI | NCE (NCR |) | | | |
| DATE | STEP | Description of NC | <u> </u> | Corrective Action Section | | Verific | cation | Approval | Approval |
| | SIEP | Section A | Initial Chief Eng | Action Description Chief Eng | Sign & Date | Secti | | Chief Eng | QC Inspector |
| | | | | | | | | | |
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[#] H:\fFORMS\Quality Assurance\approved QA\NCRWO RevD

July 14, 2009 2:44:39 PM

Item ID:

D3156-1

Revision ID:

В Bracket

Item Name: **Start Date:**

7/15/09

Start Qty: 8.00

Req'd Qty: 8.00



Date:

Accept



Run

Setup Start





Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Date:

Plan

Code

Draw

Start

Stop

Reject



Number Stamp

Insp.

QC:

Required Date: 7/15/09

Sequence ID/

Work Center ID

130

QC

Quality Control

Operation Description

QC8- Inspect parts - second check

Memo

Set Up/ **Run Hours**

SPC (Y/N):

Rev. Number Sorlan 23

Draw

Accept

Qty

Reject

Qty

140

Small Fab Small Fab

Small Fab

Memo Deburr 0.00

0.00

\$ 09/07/23

14

150

Brake NC

Brake NC

NC BRAKE

Memo

Form as per Dwg D3156

0.00

0.00

83 09/07 /03 14 9

Dart Aerospace Ltd

| W/O: | | WORK ORDER CH | ANGES | | | | |
|---------|------|------------------------|----------|-----------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | Ву | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Part No | : | PAR #: Fault Category: | NCR: Yes | No DQ | A: | Date: _ | |
| | | | QA: I | N/C Close | d: | Date: | |

| NCR: WORK ORDER NON-CONFORMANCE (NCR) | | | | | | | | |
|---------------------------------------|-------------------|---|--|---|--|---|--|--|
| | Description of NC | | Corrective Action Section B | | Varification | Approval | Ammenual | |
| STEP | Section A | InitialAction DescriptionSign &Chief EngChief EngDate | | Section C | Chief Eng | Approval QC Inspector | | |
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| | | | | | | | | |
| | STEP | STED Description of NC | STEP Description of NC Section A Initial | STEP Description of NC Corrective Action Section B Section A Initial Action Description | STEP Description of NC Section A Initial Action Description Sign & | STEP Description of NC Corrective Action Section B Verification Section A Action Description Sign & Section C | STEP Description of NC Corrective Action Section B Verification Approval Section A Section C Chief Eng | |

July 14, 2009 2:44:39 PM

Item ID:

D3156-1

Revision ID:

В Bracket

Item Name:

Start Date:

7/15/09

Required Date: 7/15/09

Start Qty: 8.00

Req'd Qty: 8.00





Setup Start



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

QC:

Date:

Date:

Tooling: SPC (Y/N): Date:

Date:

Start Run

Stop



Sequence ID/

Work Center ID

160

QC

Quality Control

Operation Description

QC5- Inspect part completeness to step on W/O

Memo

Set Up/ **Run Hours**

Draw Number Draw Rev.

Plan Code

Accept Qty

Reject Qty

Reject Insp. Number Stamp

0.00



170

HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

Memo

0.00

180

Quality Control

QC3- Inspect Part Finish

Memo

BL 09-07-23 (14)



| Dart Ae | rospace Ltd | | | | | | | |
|---------|-------------|--------|--------------------|---------------|-----------|-----|-------------------------------------|--------------------------|
| W/O: | | | WORK ORDER | CHANGES | | | | |
| DATE | STEP | PR | OCEDURE CHANGE | Ву | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
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| | | | | | | | | |
| Part No | • | PAR #: | Fault Category: | NCR: Yes | No DQ | A: | Date: | |
| | | | | QA: | N/C Close | d: | _ Date: _ | |
| NCR: | | | WORK ORDER NON-CON | IFORMANCE (NO | R) | | | |

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | | | | | |
|-----------|--|----------------------------------|--|-----------------------------|----------------|--------------|-----------|--------------------------|--|--|--|--|
| | | Description of NC | | Corrective Action Section B | | Verification | Approval | Ammanual | | | | |
| DATE STEP | | Section A | Initial Action Description Chief Eng Chief Eng | | Sign & Date | Section C | Chief Eng | Approval QC Inspector | | | | |
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July 14, 2009 2:44:39 PM

Item ID:

D3156-1

Revision ID:

Bracket Item Name:

Start Date: 7/15/09

Required Date: 7/15/09

Start Qty: 8.00

Operation

Description

Req'd Qty: 8.00

Accept



Run

Setup Start

Stop



Cust Item ID:

Customer:

Draw

Number

Reference:

Approvals:

Process Plan:

QC:

Date:

Date:

Tooling:

SPC (Y/N):

Set Up/

Run Hours

Date:

Date:

Draw

Rev.

Start

Stop



Sequence ID/ Work Center ID

190

Packaging

Memo

Identify as per dwg & Stock Location: 68

0.00

0.00

Code

Plan

Accept Qty

Reject Qty

Reject Number Stamp

Insp.

Packaging

200

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

09607/2-

W 91.22.24

| Dart Ae | rospace | Ltd | | | | | | | |
|---------|---------|--------------------------------|------------|--|--------|--------------------|------------|-------------------------------------|--------------------------|
| W/O: | | | W | ORK ORDER CHANGES | | | | | |
| DATE | STEP | PROCEDURE CHANGE | | | Ву | Date | Date Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| · | | | | | | | | <u> </u> | |
| | | | | | | | | | |
| Part No | : | PAR #: | Fault Cate | egory: NC | R: Yes | No DQ | \ : | Date: | |
| | | | | | QA: N | I/C Closed | d: | _ Date: _ | <u></u> |
| NCR: | | V | VORK ORD | ER NON-CONFORMANCE | E (NCF | ₹) | - | | |
| DATE | STEP | Description of NC Section A | Initial | Corrective Action Section B Action Description | Sign & | Verific Section | | Approval Chief Eng | Approval QC Inspector |
| | | | Chief Eng | Chief Eng | Date | 0000 | | owner and | |
| | | | | | | | | | |
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H:\fFORMS\Quality Assurance\approved QA\NCRWO RevD

Picklist Print

July 14, 2009 2:44:38 PM

Work Order ID: 50297

Parent Item:

D3156-1RevB

Parent Item Name: Bracket

Comments:

| Component Item ID. | Replacement | Mfg/ |
|--------------------|-------------|-------|
| Item Name | Item ID | Purch |
| - | | |

M2024T3S.050

Purchased

2024-T3 .050 sheet



Start Date: 7/15/09

Required Date: 7/15/09

Start Qty: 8.00

Required Qty: 8.00

| Bin | Primary | Last | Route | Unit of | Qty on | Remaining | Qty | Date | Status |
|------|----------|---------------|--------|---------|---------|-------------|--------|-----------|--------|
| Item | Location | Location | Seq ID | Measure | Hand | Qty To Pick | Issued | Issued | |
| No | · · · - | . | 110 | sf | 52.6300 | 3.8004 | | · · · · - | |

| Warehouse | Loc Qty | Loc Code | | |
|------------------|---------|----------|---------|----------|
| Location | | | | |
| Main Warehouse | | | | |
| MAT | 52.63 | | | |
| 111381 | 52.63 | | 1113801 | 189-7-20 |



Dart Aerospace Ltd

| W/O: | • | | WC | RK ORDER CHANG | GES | | | | |
|---------|---------------------------------------|---|----------------------|------------------------------|----------------|--------------|------------|-------------------------------------|--------------------------|
| DATE | STEP | PRO | OCEDURE CHAI | NGE | Ву | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| ··· | | | | | | | | | |
| Part No | : | PAR #: | Fault Cate | jory: | NCR: Yes | No DQ | A : | _ Date: _ | |
| | · · · · · · · · · · · · · · · · · · · | | | | | | d: | _ Date: _ | |
| NCR: | | • | WORK ORDE | ER NON-CONFORM | ANCE (NCR | 2) | | | |
| DATE | STEP | Description of NC Corrective Action Section B | | | | Verification | | Approval | Approval |
| DATE | SILF | Section A | Initial Chief Eng | Action Description Chief Eng | Sign & Date | Secti | | Chief Eng | QC Inspector |
| | | | | | | | | | |
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^{*}H:\fFORMS\Quality Assurance\approved QA\NCRWO RevD

| DART AEROSPA | CE LTD | Work Order: | 50397 |
|-----------------|------------|--------------|-------------|
| | | | |
| Description: | KOACKET | Part Number: | 03156 |
| | | · | |
| Inspection Dwg: | USL Rev: B | • | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

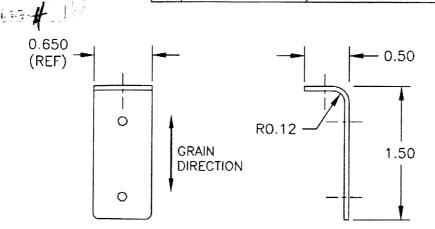
| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
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| Measured by: | ıΩ | Audited by: | 7 | Prototype Approval: | 9/ | |
| . Date: | [9-7-97 | Date: | 09/07/23 | Date: | 19 | |

| Rev | Date | Change | Revised by | Approved |
|-----|------|-----------|------------|----------|
| Α | | New Issue | KJ/JLM | |

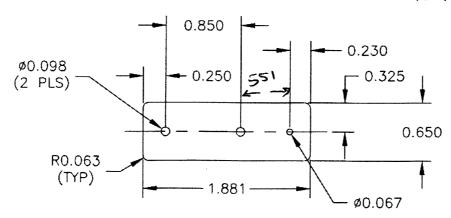


| | DESIG | H | DRAWN BY | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA |
|---|----------|---------|----------|--|
| I | CHEC | KED /// | APPROVED | DRAWING NO. REV. B |
| ı | | 世 | ₩ | D3156 SHEET 1 OF 1 |
| ı | DATE | | | TITLE SCALE |
| | 04.10.18 | | | BRACKET 1:1 |
| | Α | | 02.04.24 | NEW ISSUE |
| | В | | 04.10.18 | ADD PART MARKING |



D3156-1 BRACKET

C209107/14 W101, 50297



D3156-1 BRACKET FLAT PATTERN

NOTES:

- 1) MATERIAL: 2024-T3 SHEET (QQ-A-250/4) 0.050 THICK (REF. DART SPEC. M2024T3S.050) 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010
- 6) POSSIBLE SUPPLIER: PREMIER P/N B30-23000-117
- 7) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

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